AMENDMENTS TO THE CLAIMS

1-135. **(Canceled)**

136. **(Currently amended)** ~~The method of Claim 135, further comprising d)~~ A method for identifying a test agent as reducing inflammation in a tissue that comprises endothelial cells expressing a carboxylated glycan, said method comprising:

A) providing:

i) a carboxylated glycan that binds to a first molecule comprising one or more of S100A8, S100A9, S10012, amphoterin, annexin I, and a polypeptide sequence from amino acids 1 to 12 of annexin I, wherein said carboxylated glycan is purified by a method comprising

a) providing:

i) a second molecule comprising a carboxylated glycan;

ii) biotinylated diamino pyridine (BAP); and

iii) an exoglycosidase;

b) conjugating said second molecule to said BAP to produce a BAP-glycan conjugate;

c) treating said BAP-glycan conjugate with said exoglycosidase to produce a treated BAP-glycan conjugate comprising an anionic BAP-glycan conjugate having from 1 to 2 negative charges per molecule; and

d) isolating said anionic BAP-glycan conjugate having from 1 to 2 negative charges per molecule, thereby producing a purified carboxylated glycan;

ii) an antibody that specifically binds to said carboxylated glycans, wherein said binding is not reduced by a carboxylate-neutralized glycan; and

iii) a test agent;

B) contacting said purified carboxylated glycan, said antibody, and said test agent; and

C) detecting a reduction in the level of binding of said antibody to said purified carboxylated glycan in the presence of said test agent compared to in the absence of said test agent, thereby identifying said test agent as reducing inflammation in a tissue comprising endothelial cells that express said carboxylated glycan.

137-143 **(Canceled)**

144. **(Withdrawn)** An antibody specific for a carboxylated glycan purified by the method of Claim 123.

145. **(Withdrawn)** The antibody of Claim 144, wherein binding of said antibody to said carboxylated glycan is reduced by a carboxylated glycan, and said binding is not reduced by a carboxylate-neutralized glycan selected from an alkyl esterified glycan or alkylamidated glycan.

146. **(Withdrawn)** The antibody of Claim 145, wherein said alkyl esterified glycan is CONH-methyl-glycan.

147. **(Withdrawn)** The antibody of Claim 145, wherein said alkylamidated glycan is a methylamidated glycan.

148. **(Withdrawn)** The antibody of Claim 147, wherein said antibody is monoclonal.

149. **(Withdrawn)** The antibody of Claim 148, wherein said monoclonal antibody is an IgG antibody.

150. **(Withdrawn)** The antibody of Claim 149, wherein said monoclonal IgG antibody is mAbGB3.1.

151. (**Withdrawn**) The method of Claim 135, wherein said antibody does not specifically bind to one or more acid selected from the group consisting of glucuronic acid, galacturonic acid, sialic acid, lactic acid, pyruvic acid, and uronic acid.

152. (**Withdrawn**) The method of Claim 135, wherein said antibody does not specifically bind to one or more sulfated glycan selected from the group consisting of thyroglobulin and neural cell adhesion molecule.

153. (**Canceled**)

154. (**Withdrawn**) The method of Claim 135, wherein said antibody does not specifically bind to one or more phosphorylated sugar selected from the group consisting of glucose-1-phosphate, glucose-6-phosphate, mannose-6-phosphate, and galactose-6-phosphate.

155. (**Withdrawn**) The method of Claim 135, wherein said antibody does not specifically bind to one or more sulfated sugar selected from the group consisting of glucose-6-sulfate and galactose-6-sulfate.

156. (**Canceled**)

157. (**Withdrawn**) The method of Claim 135, further comprising d) identifying said test agent as reducing adherence of leukocyte cells to endothelial cells that express said carboxylated glycan.

158. (**Withdrawn**) The method of Claim 135, further comprising d) identifying said test agent as reducing transmigration of leukocyte cells in endothelial tissue that comprises endothelial cells expressing said carboxylated glycan.

159. (**Withdrawn**) The method of Claim 135, further comprising d) identifying said test agent as reducing extravasation of leukocytes cells in endothelial tissue that comprises endothelial cells expressing said carboxylated glycan.

160-161. (**Canceled**)

162. (**Withdrawn**) The method of Claim 135, further comprising d) identifying said test agent as reducing growth of neuron cells that express said carboxylated glycans.

163. (**Withdrawn**) The method of Claim 123, wherein said isolated first anionic BAP-glycan conjugate in step d) has 1 negative charge per molecule.

164. (**Withdrawn**) The method of Claim 124, wherein said isolated second anionic BAP-glycan conjugate in step f) has 1 negative charge per molecule.

165-166 (**Canceled**)

167. (**New**) A method for identifying a test agent as reducing specific binding of a polypeptide to a carboxylated glycan, comprising:

A) providing:

i) a carboxylated glycan purified by a method comprising

1) providing:

a) a molecule comprising a carboxylated glycan;

b) biotinylated diamino pyridine (BAP); and

c) an exoglycosidase;

2) conjugating said molecule to said BAP to produce a BAP-glycan conjugate;

3) treating said BAP-glycan conjugate with said exoglycosidase to produce a first treated BAP-glycan conjugate comprising a first anionic BAP-glycan conjugate having from 1 to 2 negative charges per molecule; and

4) isolating said first anionic BAP-glycan conjugate having from 1 to 2 negative charges per molecule, thereby producing a purified carboxylated glycan;

ii) antibody mAbGB3.1 produced by a cell designated as ATCC GB3-1, wherein said antibody specifically binds to said carboxylated glycan, and wherein said binding is not reduced by a carboxylate-neutralized glycan; and

iii) a test agent;

B) contacting said purified carboxylated glycan, said antibody, and said test agent; and

C) detecting a reduction in the level of binding of said antibody to said purified carboxylated glycan in the presence of said test agent compared to in the absence of said test agent, thereby identifying said test agent as reducing specific binding of a polypeptide to a carboxylated glycan.

168. (**New**) A method for identifying a test agent as reducing specific binding of a polypeptide to a carboxylated glycan, comprising:

A) providing:

i) a carboxylated glycan purified by a method comprising

1) providing:

a) a molecule comprising a carboxylated glycan;

b) biotinylated diamino pyridine (BAP); and

c) an exoglycosidase;

2) conjugating said molecule to said BAP to produce a BAP-glycan conjugate;

3) treating said BAP-glycan conjugate with said exoglycosidase to produce a first treated BAP-glycan conjugate comprising a first anionic BAP-glycan conjugate having from 1 to 2 negative charges per molecule; and

4) isolating said first anionic BAP-glycan conjugate having from 1 to 2 negative charges per molecule, thereby producing a purified carboxylated glycan;

ii) antibody mAbEE4.1 produced by a cell designated as ATCC EE4-1, wherein said antibody specifically binds to said carboxylated glycan, and

wherein said binding is not reduced by a carboxylate-neutralized glycan; and

iii) a test agent;

B) contacting said purified carboxylated glycan, said antibody, and said test agent; and

C) detecting a reduction in the level of binding of said antibody to said purified carboxylated glycan in the presence of said test agent compared to in the absence of said test agent, thereby identifying said test agent as reducing specific binding of a polypeptide to a carboxylated glycan.

169. (**New**) A method for identifying a test agent as reducing specific binding of a polypeptide to a carboxylated glycan, comprising:

A) providing:

i) a carboxylated glycan purified by a method comprising

1) providing:

a) a molecule comprising a carboxylated glycan;

b) biotinylated diamino pyridine (BAP); and

c) an exoglycosidase;

2) conjugating said molecule to said BAP to produce a BAP-glycan conjugate;

3) treating said BAP-glycan conjugate with said exoglycosidase to produce a first treated BAP-glycan conjugate comprising a first anionic BAP-glycan conjugate having from 1 to 2 negative charges per molecule; and

4) isolating said first anionic BAP-glycan conjugate having from 1 to 2 negative charges per molecule, thereby producing a purified carboxylated glycan;

ii) antibody mAbEH2.7 that specifically binds to said carboxylated glycan, wherein said binding is not reduced by a carboxylate-neutralized glycan; and

iii) a test agent;

B) contacting said purified carboxylated glycan, said antibody, and said test agent; and

C) detecting a reduction in the level of binding of said antibody to said purified carboxylated glycan in the presence of said test agent compared to in the absence of said test agent, thereby identifying said test agent as reducing specific binding of a polypeptide to a carboxylated glycan.

170. (**New**) The method of Claim 136, further comprising

D) administering said test agent to a mouse having inflammation in a tissue comprising endothelial cells that express said carboxylated glycan, and

E) detecting a reduction in said inflammation in the presence of said test agent compared to in the absence of said test agent.

171. (**New**) The method of Claim 136, wherein said first molecule comprises S100A8.

172. (**New**) The method of Claim 136, wherein said first molecule comprises S100A9.

173. (**New**) The method of Claim 136, wherein said first molecule comprises S10012.

174. (**New**) The method of Claim 136, wherein said first molecule comprises amphoterin.

175. (**New**) The method of Claim 136, wherein said first molecule comprises annexin I.

176. (**New**) The method of Claim 136, wherein said first molecule comprises a polypeptide sequence from amino acids 1 to 12 of annexin I.